

DNA Replication Interface Mini™

Industry: Medical and Healthcare

Summary

Customer Challenge

DNA replication, or DNA synthesis, is the process of a cell making an identical copy of its DNA. This biological process is essential for cell division, growth, and the transmission of genetic information. A scientist needs monitor the fluid flow dispensed.

Interface Solution

Interface's SMTM Micro S-Type Load Cells are placed in the column where fluids from the synthesizer are dispensed. The SMTM's can regulate how much fluid is being dispensed for the sequence to be completed. The measurements are captured using the 9330 Battery Powered High Speed Data Logging Indicator through an SD card, or directly on a laptop with supplied BlueDAQ software.

Results

Interface's miniature load cell and instrumentation was able to successfully monitor the fluid being dispensed in the DNA synthesizer.

Materials

- SMTM Micro S-Type Load Cells
- 9330 Battery Powered High Speed Data Logging Indicator
- BlueDAQ Software
- DNA Synthesizer

How It Works

1. Multiple SMTM Micro S-Type Load Cells are placed under each of the DNA capsules of in the socket plate.
2. When connected to the 9330 Battery Powered High Speed Data Logging Indicator, force results can be captured on the SD card or directly on the customer's laptop with supplied BlueDAQ software for data analysis and review.

